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## **Taiwan**

### **Fresh Deciduous Fruit**

#### **Annual**

#### **2008**

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**Report Highlights:**

The apple is, far and away, the most heavily consumed imported fruit in Taiwan. Fuji, with its sweet taste and firm texture, remains the overwhelmingly favored variety – recently accounting for 85% of total retail apple sales. The consumption of apples is not expected to reach the highs seen in the late 1990s but should remain in the 130-145 K mt range through the next several years. The United States should remain the dominant player in the next years with an expected total market share of around 40%.

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Includes PSD Changes: Yes  
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## Executive Summary

Taiwan produces a small amount of fresh apples with current annual production of nearly 6,000 metric tons that reflects a downward trend since Taiwan's accession to the WTO in 2002.

While the apple remains by far the most important item in Taiwan's fruit import profile, it faces flat demand as economic conditions hold back liberal consumer spending and an increasing variety of fruits (both imported and domestic) pry consumer dollars away from traditional stand-bys. Volumes are anticipated to remain in the 130~145K mt range through the next several years.

The entry of major apple suppliers from Japan and Korea in the Northern Hemisphere and New Zealand and Chile in the Southern Hemisphere that were formerly only allowed to export to Taiwan under quota has shifted some market share away from U.S. apple suppliers. Overall market share of apple imports from the United States has continued to decline since 2002.

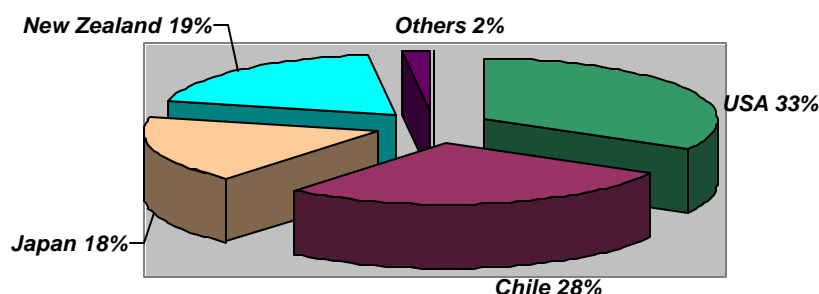
A continued general preference among Taiwan importers for U.S. apples (best taste, appearance, stable quality) must be tempered by an understanding that Taiwan is a price sensitive market. Improving supplier capabilities worldwide, particularly in the southern hemisphere, promises to pressure U.S. suppliers with increasing crop volumes and improved cold storage capabilities.

To face the increasing competition particularly from Japan, Korea, Chile and New Zealand and to maintain our dominant position, further brand loyalty building for U.S. apples in Taiwan is crucial. Apples from China (PRC) remain absent from the market due to the lack of a phytosanitary protocol on apples between the two economies.

## Taiwan Apple Imports

July 2007-June 2008

Total Imports: 134,395 mt

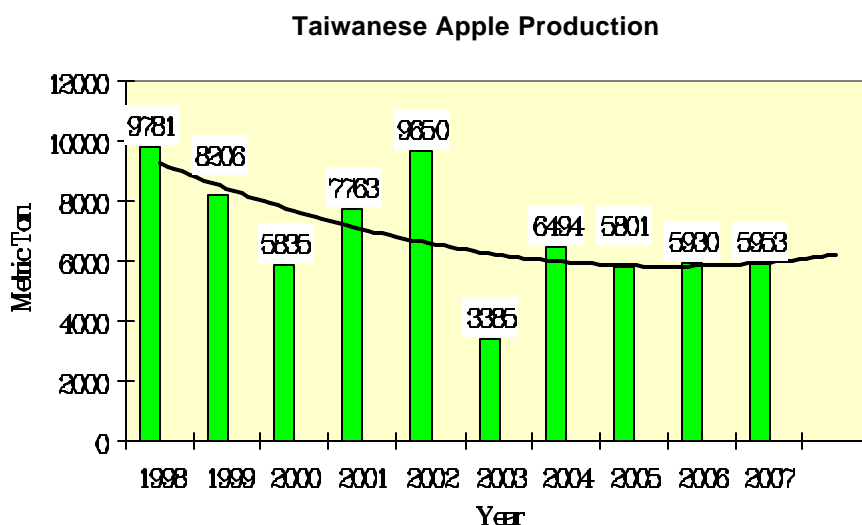
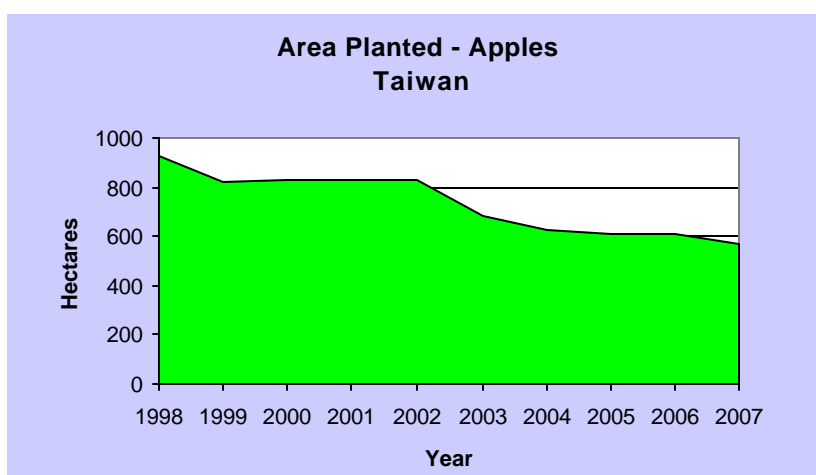


Source: Taiwan Council of Agriculture

## Production

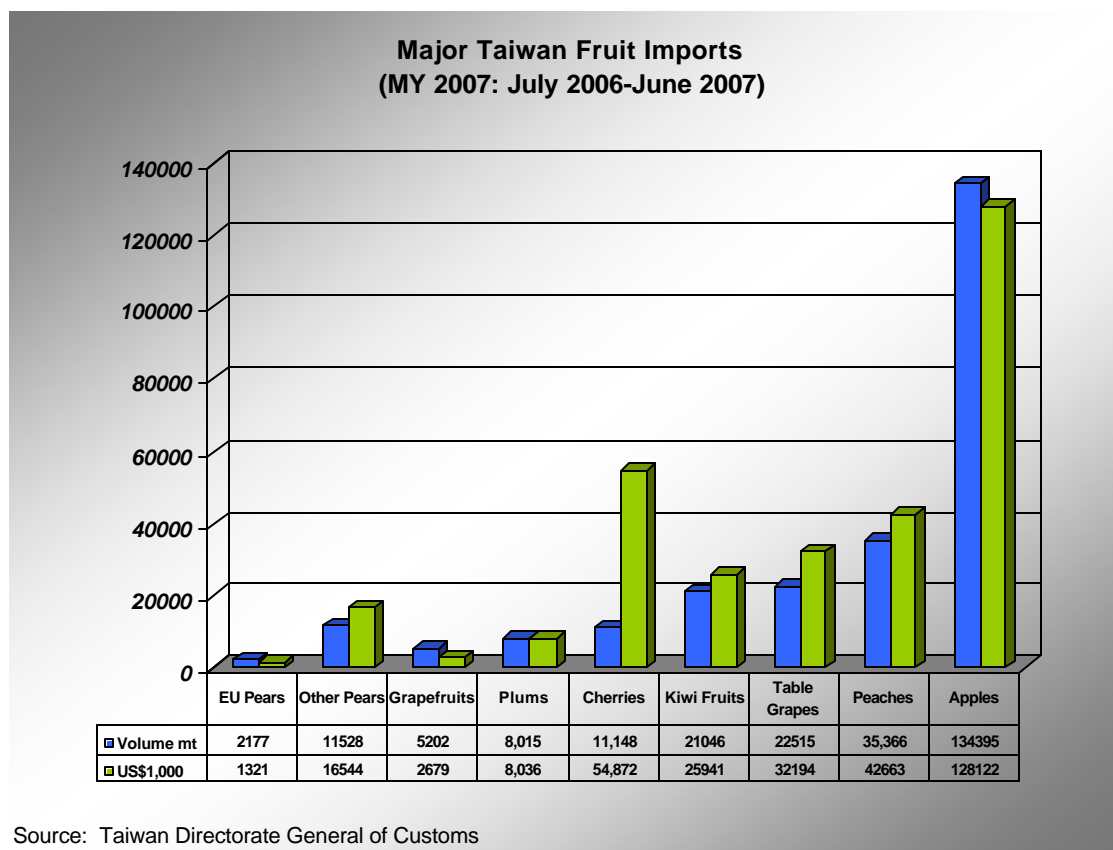
Even prior to accession to the World Trade Organization (WTO) in 2002, Taiwan's annual apple crop, grown in orchards set in Taiwan's temperate central mountain range, was not significant, less than 10,000 mt per year. Since WTO accession and market liberalization, cropland has been steadily taken out of production, so that in MY2007 less than 6,000 mt of fresh apples were harvested. At its best, local production is currently able to supply only some 4% of domestic demand, making the impact of annual fluctuations in local crop yields on imports insignificant. The industry is likely to continue slowly contracting due to high production costs and labor retention problems. The area harvested is not expected to change significantly over the next 1-2 years.

Local production is principally the Fuji variety. Nearly 100 percent of commercially-grown local apples are estimated as sold for fresh consumption.



## Marketing

The apple is, far and away, the most heavily consumed imported fruit in Taiwan. Only oranges, 95% of which are grown domestically, are consumed in greater quantity. However, in terms of real growth, the apple is losing ground to a host of other imported fruits, including grapes, cherries, peaches, and berries. Due to the variety of imported and domestic fruits now available, consumption of apples is not expected to reach the highs seen in the late 1990s without some new factor or factors changing the competitive picture (e.g., such as new positive findings regarding the health benefits of apples or an expansion of fruit consumption in general).



European pears (*Pyus Communis*)

Asian Pears (*Pyus Pyrifolia*)

Nearly all fresh fruit imports, apples included, are consumed as fresh produce. The Taiwan consumer's emphasis on both convenience and freshness is the key to channel fresh produce in the market. Currently, traditional/neighborhood wet markets account for about 50% of all fresh apple sales, followed by small fruit shops/street hawkers (34%), and supermarkets/hypermarkets (16%). Due to current sluggish economy and continuous acquisition/merger in-between the supermarket/hypermarket industry, store expansion for these modern retail stores is anticipated to slow down and thus overall re-structuring of the market share is not expected in the near future.

**Fresh Apple - Retail Distribution Channel**

Traditional/neighborhood wet markets	50%
Supermarkets/hypermarkets	16%
Small fruit shops/street hawkers	34%



Fuji, with its sweet taste and firm texture, remains the overwhelmingly favored variety – recently accounting for 85% of total retail apple sales. The remainder is comprised of Gala, Pacific Rose, Red Delicious, Granny Smith, Pink Lady, green yellow Japanese apples, Japanese Mutsu, Japanese World #1, and Cameo (in priority order).

Taiwanese send food products in gift packages to their friends and relatives during three major lunar year festivals: Chinese New Year (usually in February); the Dragon Boat Festival (usually in June); and the Moon Festival (usually in September). Fruit, particularly Fuji apples, is one of the most popular gift items during lunar New Year holiday in Taiwan. Due to Taiwan's economic recession and political chaos, local traders reported a weaker sale for the last lunar New Year holiday (February 2008).

With a rich variety of native fruits, the vast majority of Taiwanese view fruit as an important part of the daily diet. Fruit is frequently eaten as a snack as well as dessert and is the most common food prepared to serve to visitors in the home or office.

The Taiwan consumers' preference for the apple over other fruit is grounded in a number of factors, including appreciation of nutritive/health benefits, relatively low price, a strong quality image, attractive appearance, and relatively long shelf life. Furthermore, the year-round availability of the apple is attractive to retailers, because point-of-sale formats need not be rotated - as is necessary for fruits available only at certain times of the year.

### **“Five-A-Day” Program**

In April 2007, ATO Taipei, the Washington Apple Commission, and 12 U.S. fruit and vegetable trade associations, funded by USDA's Global Based Initiative (GBI) program, joined the Formosa Cancer Foundation's (FCF) “Five-A-Day” program in Taiwan. Through the GBI program, the FCF developed and printed new nutritional materials featuring U.S. fruit and vegetables to train so far more than 400 volunteer nutritionists island-wide on the nutritional advantages of U.S. produce, and to conduct in-school nutritional seminars which have reached more than 100,000 children from around 1,000 elementary schools, and, by extension, their families. The program has been very popular with Taiwan schools, and more and more schools are requesting inclusion in the program. The goal is to foster substantial and long-term growth in fresh fruit and vegetable consumption in Taiwan resulting in a healthier population. As the major supplier of imported fruit and vegetables in Taiwan, the United States will certainly stand to benefit significantly from any increase in consumption.



The program was launched in April 2007 with a press conference announcing the results of a nutritional survey which reported findings that most Taiwan school children barely consume 1.5 portions of fresh fruit and/or vegetables each day. Interactive, promotional materials were created and distributed to numerous schools through FCF nutritionists from April through November 2007. The 2007 program concluded on December 11, 2007 with a lucky drawing where several children received various prizes including air tickets from United Airlines and cartons of fresh fruit from several US fruit importers. The “Five-A-Day” promotion has attracted a great deal of media attention in Taiwan with various reports, print or electronic, on the program and the nutritional value of fresh fruit & vegetables.





With the efforts of the ATO Taipei, Wellcome Supermarket, Taiwan's leading retail store chain, has joined in the 2008 "Five-A-Day" program.

Children who hold fresh fruit & vegetable "checks" issued by the FCF will receive discount prices for purchases of any designated fruit & vegetable items including U.S. apples at any of the 225 Wellcome Supermarket stores island-wide. The 2008 lucky drawing will be held in December in Taipei with

again various prizes including an U.S.-Taiwan round trip ticket from United Airlines and many other prizes created for children by all cosponsors.

The ATO Taipei is fully supportive of the initiative of this 3-year GBI program. The program is a win-win situation for all parties involved. The Washington Apple Commission has already submitted a request to FAS headquarters to continue the program for another year through June 2009.

### Good "Face Value"

Unless bought solely for personal consumption, the color, size, and general appearance of fruit is typically quite important to Taiwan retail customers. The "best-looking" fruit, sold in gift packaging, fetches the highest prices. The most expensive apples on the market, Japan-grown Fujis, sell well at premiums of 100% because of their size and consumers' quality perceptions.

While countries like the United States, Chile and New Zealand continue to focus on supplying the Taiwan market with traditional varieties, Japan is having some success at introducing less common varieties into the market to maintain its "premium" image and justify higher prices to consumers. It is not uncommon to find Japanese and Korean fruit in the market at US\$6-8 per piece.

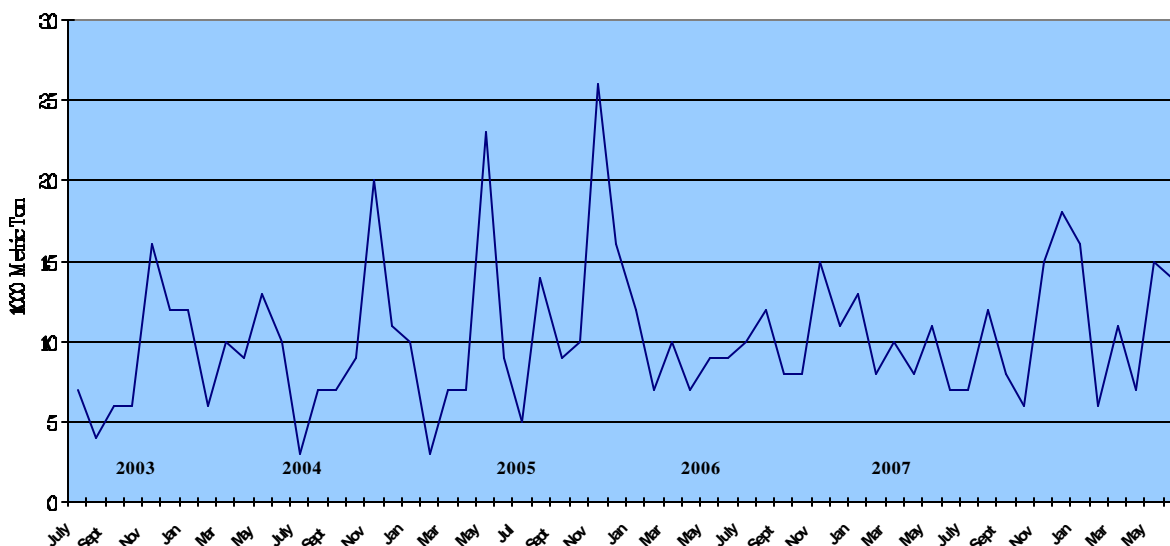
### Seasonal Preferences

While eaten year round, Taiwan consumers purchase significantly more apples during the autumn and winter months - the prime production months for northern hemisphere growers. Reasons for this include general perception of the apple as a "cool weather" fruit and the incorporation of apples into the many festivals held during this time of the year. Local, tropical fruit such as mangos, papaya, and lychees dominate the summer months.

The chart below illustrates the higher-than-average apple imports during Taiwan's autumn & winter months recorded over the past five years.



**Taiwan Apple Import Volume Per Month**  
MY2003 - MY2007



Source: Taiwan Council of Agriculture

## Trade

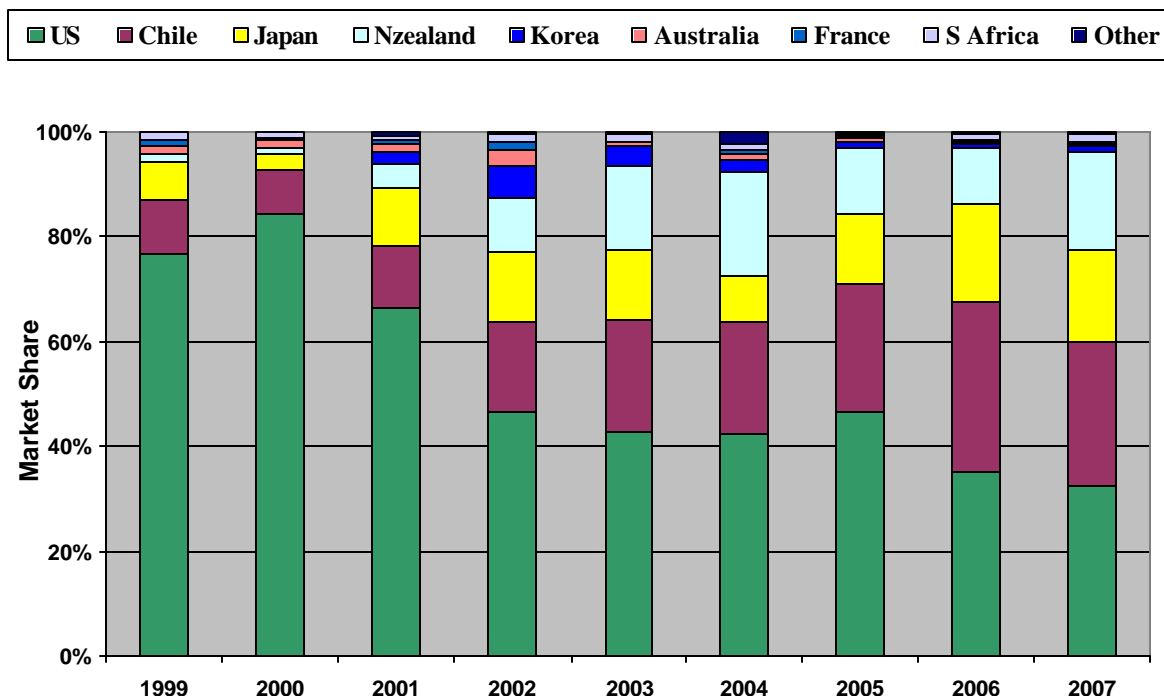
In MY2007, Taiwan imported a total of 134,395 metric tons or over US\$128 million worth of apples, a 11 percent increase in terms of volume and a 19 percent increase in terms of value from the previous year. The United States continued to be the leading supplier with nearly 33% of the market, followed by Chile (28%), New Zealand (19%), and Japan (18%). Currently, U.S. apple exports are mainly from Washington State, accounting for nearly 90% of the total exports. California apple exports to Taiwan have declined in recent years. As shown in the table below, the U.S. market share began a downward trend in 2001. Taiwan's 2002 entry into the WTO eliminated previous quota restrictions on all countries formerly approved to export to Taiwan under quota (Chile, New Zealand, Australia, Japan, South Africa, Argentina, and the European Union) and removed a previous ban on apple imports from South Korea. China remains prohibited from exporting fresh apples to Taiwan.

With the Taiwan fresh apple consumption 'pie' looking set to remain at about the same size for the coming few years and the market open to all major producers (with the important exception of China), importers now have a broad choice of suppliers and countries from which to choose. The pie, divided up, will keep varying based on supplier prices, product quality, and availability.

## Taiwan Apple Imports, by Country of Origin

Marketing Year (July-June) 1999-2007

Unit: MT



Source: Taiwan Council of Agriculture

Today, Taiwan's consumption of apples, in the 115 – 140K mt range, likely represents a "floor" demand that will continue to hold unless significant consumer preference changes (either for or against apples) occur.

In general, while Taiwan buyers do express a continued preference for U.S.-origin Fuji apples, apple importers have shown themselves more than willing to shift purchase orders to other competing supplier countries when cost factors run against U.S. exporters. A recently significant change of attitude towards importing apples by Taiwan importers is that they do not want to risk placing a large volume forward orders of apples from one single supplier or country wherever its apple exports might be suspended due to detection of codling moth or peach moth. Taiwan importers need the flexibility to switch their orders to other countries if the supplier country was to be suspended. As a result of this new trend, many larger U.S. companies are less eager to offer aggressive pricing on smaller, multiple orders of product.

At the consumer level, Japanese apples have currently received mixed to positive reviews (generally good taste, relatively small size, average appearance, competitive price.) Korean apples have been supplied with inconsistent quality and average appearance and sweetness. Therefore, growth of the market share for Korean suppliers has fallen behind other competitors.

The U.S. is expected to remain the dominant player through the coming years with an expected total market share around 40%. Japanese exports have continued to rise,

showing a 6% growth during MY2007, shriveling Korea's share of the market and shifting market share away from other northern hemisphere suppliers.

Taiwan currently applies a 20% tariff on apple imports, down significantly from the 50% tariff applied prior to January 2002. Taiwan Customs assesses tariffs due on a shipment based on a region-specific reference price rather than the invoiced value.

### General Phytosanitary Requirements

U.S. apple exports to Taiwan are subject to pest-free phytosanitary certification requirements with the following pests: (1) codling moth, (2) apple maggot, (3) plum curculio, (4) western flower thrips, and (5) fire blight. Export of all fresh fruit from the regulated areas in San Diego County, California is suspended due to the interception of Mediterranean fruit flies. Taiwan's Bureau of Animal & Plant Health Inspection & Quarantine (BAPHIQ) publishes the amended requirements that *A. ludens*, *A. obliqua*, *A. serpentine*, and *A. fraterculus* are listed in the category of prohibition of entry, which will be effective on March 1, 2009. In this new amendment, BAPHIQ agrees to delist the State of Texas from the regulated areas for *A. obliqua*, *A. fraterculus*, and *A. serpentine*. Although APHIS lifted the quarantine restriction in Texas for *A. ludens* on August 20, 2008, BAPHIQ will not consider lifting the restrictions unless there is no interception of *A. ludens* in Texas over a year since the last detection, March 27, 2008. Mexican fruit fly host materials originated from Texas are prohibited to export to Taiwan as of March 1, 2009 if BAPHIQ has not recognized Texas as a State of free from *A. ludens*. There is no apple export from Texas according to BAPHIQ's data.

In August 2003, the U.S. and Taiwan agreed on a new systems approach quarantine work plan for apples that requires improved pre-screening in the packing shed, while also putting in place a system of graduated penalties for detection of codling moth, permitting three codling moth detections (three strikes) in the course of routine inspections in Taiwan before the market is shut down to suppliers from the affected country and investigations are made. Currently, the three strikes still remain as penalties. The "correction period" for one strike, no matter how many detections are found during the correction period, has been extended to two weeks since the 2007-2008 apple season. The supplier is required to provide an investigation report and take needed corrective action during the "correction period."

Taiwan establishes its own maximum residue limits (MRLs) for chemical compounds and many pesticides used in the United States have not been assigned Taiwan MRLs. The default MRL for a compound where a MRL has not been established is the smallest detectable amount – which is effectively zero. Violation of the standard generally results in the recall of the product. FAS and APHIS offices are working with Taiwan authorities to speed up the process of establishing new MRLs or in ways to adopt MRLs through international standard bodies such as the CODEX. The lack of MRLs for a long list of chemical compounds not commonly used in Taiwan effectively results in a "ban" on many imported products into the Taiwan market. This problem is being taken very seriously.

Imports of fruit and vegetables are subject to inspection for pesticides at port of entry by Taiwan's Bureau of Standards, Metrology & Inspection (BSMI). Currently, Taiwan uses state of the art inspection systems for pesticide residues on imported fresh fruit and vegetables. Each fruit shipment will have 2.5 percent of chance of being sampled and tested upon arrival by the BSMI for pesticide residues. Shipments are released for sale after the retrieval of samples and a document review. Noncompliance with

Taiwan's pesticide standards results in the recall of the unconsumed shipment product. And, the chance of being tested by BSMT for the next shipment imported by the same importer despite sources will be increase to 20 percent. If the same company continues to violate the pesticide standards for the third shipment, then all shipments imported by this company will be subject to testing. Release of these shipments is not permitted until testing is completed. The upgrade of the testing probability is subject to continuous five shipments by the same company with a total volume of over three times of the previous shipment that violated the regulations.

### **The China Factor in Competition in the Taiwan Apple Market**

Private investment has been flowing from Taiwan into China to develop Fuji apple production - particularly into Shandong province, China's major deciduous fruit farming area. As the world's largest producer of apples, China, and its potential to export large quantities of cheap, good quality apples to Taiwan now that both are in the WTO, is of concern to many apple exporters.

The entry of Chinese apples into Taiwan presently hinges on Taiwan's certification of China's phytosanitary controls in apple growing areas and handling processes. Certification will not happen until the two sides agree to negotiate how such certification is to be done. Continued uneasy political relations between the two sides of the Taiwan Strait give no indication as to when such negotiations may start. Therefore, industry believes it highly unlikely that Chinese apples will arrive in the market during the coming 2~3 year period. However, presuming that Chinese apples will eventually be permitted in, some in the industry believe that the United States can still retain its position as the leading apple supplier to Taiwan. Factors in support of this opinion include:

**Quality.** While China has cultivated apples for centuries, the Fuji apple is a relative newcomer. Experience and time is required to develop not only the technical infrastructure but also the expertise to cultivate, select, grade, package, and deliver premium Fuji apples in the manner which Taiwan distributors and consumers expect.

**Price.** Industry watchers report that, when China exports its highest quality apples, quoted prices have not been significantly different from those quoted by U.S. suppliers.

**Season.** China's apple season is similar to that of Washington State. Apples from other growing regions in the U.S., such as California, should face less direct competition in Taiwan from China growers.

**Domestic Consumption.** China's own blossoming domestic demand for high quality apples may meet or even exceed domestic production capacity, leaving less for export - even as production volume expands. Also, Taiwan investors in Chinese orchards are reportedly most interested to develop domestic PRC market sales.

**Phytosanitary Controls.** Taiwan's strict controls on codling moth in apples will likely be difficult for Chinese growers and packers to meet. Even if the two quarantine services can eventually reach agreement on a quarantine work plan, there is some doubt as to China's capability to ship pest-free fruit.

## **Prices & Marketing**

Since 1998, the apple industry in Taiwan has faced a downward pricing curve as stagnant or decreasing demand is being met by increasing volumes of imported fruit. Prices between and within apple varieties vary greatly based on seasonal consumption variations, supplier country-of-origin, supplier pricing competition, and so on. In

general, Fuji apples are available in less quantity for import into Taiwan; suppliers therefore could demand and receive high premiums on sales.

The apple symbolizes many positive things to the Taiwan consumer. When purchased as a gift or to serve to others, the country of origin, size, appearance, and taste remain as important as price in the consumer's decision to buy. Therefore, to maintain its dominant position - particularly against "new" competitors such as Japan, Korea and New Zealand - U.S. suppliers are recommended to continue working closely with Taiwan importers, distributors, and retailers to reinforce the strong positive image that U.S. apples presently enjoy in Taiwan to ensure continued consumer loyalty to U.S.-origin apples.

## Statistics

**Fresh Apple Production, Supply, and Demand (PS&D) Table**

Apples, Fresh Taiwan	2006			2007			2008		
	2006/2007			2007/2008			2008/2009		
	Market Year Begin: Jul 2006			Market Year Begin: Jul 2007			Market Year Begin: Jul 2008		
	Annual Data Displayed		New Post	Annual Data Displayed		New Post	Annual Data Displayed		Jan
			Data			Data			Data
Area Planted	608		608	600		568			550 (HA)
Area Harvested	608		608	600		568			550 (HA)
Bearing Trees	213		213	210		200			190 (1000 TREES)
Non-Bearing Trees	0		0	0		0			0 (1000 TREES)
Total Trees	213		213	210		200			190 (1000 TREES)
Commercial Production	5,930		5,930	5,200		5,953			5,500 (MT)
Non-Comm. Production	0		0	0		0			0 (MT)
Production	5,930		5,930	5,200		5,953			5,500 (MT)
Imports	120,703		120,703	130,000		134,395			130,000 (MT)
Total Supply	126,633		126,633	135,200		140,348			135,500 (MT)
Fresh Dom. Consumption	126,633		126,633	135,200		140,348			135,500 (MT)
Exports, Fresh	0		0	0		0			0 (MT)
For Processing	0		0	0		0			0 (MT)
Withdrawal From Market	0		0	0		0			0 (MT)
Total Distribution	126,633		126,633	135,200		140,348			135,500 (MT)
TS=TD			0			0			0
Comments									
AGR Number									
Comments To Post									

Source: Taiwan Council of Agriculture

## Fresh Apple Trade Matrices

## Import Trade Matrix

Country	Taiwan		
Commodity	Apples, Fresh		
Time Period	MY 06/07	Units:	MT
Imports for:	2006		2007
U.S.	42201	U.S.	43719
Others		Others	
Chile	39559	Chile	36992
Japan	22302	Japan	23635
New Zealand	13157	New Zealand	24911
Korea	1317	South Africa	2139
Australia	853	Korea	1749
Canada	646	France	410
South Africa	348	Canada	423
France	320	Australia	416
Total for Others	78502		90676
Others not Listed	0		0
Grand Total	120703		134395